

A COLLECTION OF AMPHIBIANS AND REPTILES FROM GOGEBIC COUNTY, MICHIGAN.

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Records from Gogebic County are included in but few of the reports on the herpetology of northern Michigan and in all these reports refer to a single species, *Thamnophis sirtalis* (Linnaeus).¹ Gogebic County is situated at the extreme western end of the Upper Peninsula of Michigan. The county lies approximately between the forty-first and forty-second degrees north latitude and between the eighty-eighth and ninetieth degrees west longitude. The topography of the county is more or less broken, there being many rocky hills. Much of the higher ground is covered by heavy hardwood forests some of which, however, have been cut over. In contrast to these habitats there are many dense arbor-vitæ swamps and occasionally small tracts of cleared farm land. In many places forest fires have laid waste large areas. Rivers, lakes, and large ponds are numerous. The climatic conditions of the county undoubtedly have a very decided effect upon the fauna. The winters are long and severe, usually lasting from October until May, during which time from one to several feet of snow fall and the temperature often reaches forty degrees below zero Fahrenheit. In 1913 the first snow of six inches fell on September 21. In the spring the snow does not disappear usually until the latter part of April, and during the spring of 1914 about three inches of snow fell on May 12. With the coming of warm weather lowlands for some distance on either side of the streams are overflowed. This condition continues for some time after all of the snow has disappeared from the woods. Summer weather does not usually begin before May. The summers are usually short and the temperature rarely exceeds ninety degrees Fahrenheit. The evenings are cool and frost may be expected any time after the first of August.

During the years of 1913 and 1914 while the writer was a resident of the county an effort was made to collect representatives of all of the species of amphibians and reptiles found there. The species taken are listed below. The collections were made in the vicinity of Wakefield, which is centrally located in the county. In all eleven species were taken, ten of these being recorded from Gogebic County for the first time and one being an addition to the fauna of the Northern Peninsula of Michigan.

¹ Ruthven, A. G., *Herpetology of Michigan*, Mich. Geol. and Biol. Surv., 1912; and Ruthven, A. G. *Bull.* 61, U. S. National Museum, 1908.

AMPHIBIA.

CAUDATA.

1. *PLETHODON ERYTHRONOTUS* (Green).

The red-backed salamanders were found to be common in decayed tree trunks in the woods. Their preference seemed to be for pine logs, although they were found in the decayed trunks of other trees as well as under stones and rubbish. One individual was taken with a partly regenerated tail.

12 specimens, 56-98 mm., September 26, 1913, U.S.N.M., No. 51943-51954.

2. *AMBYSTOMA JEFFERSONIANUM* (Green).

Common in the lowlands near small streams, under logs.

6 specimens, 54-65 mm., September 26, 1913, Nos. 51937-51942.

SALIENTIA.

3. *HYLA PICKERINGII* Holbrook.

Although the species is common in the region, judging from the numbers of individuals seen and the calls heard, specimens were difficult to obtain. Several specimens were taken in swampy places near Sunday Lake.

1 specimen, 17 mm., September 6, 1913, No. 51923.

2 specimens, 26 and 28 mm., May 9, 1914, Nos. 51924-51925.

4. *HYLA VERSICOLOR* LeConte.

A specimen of this species was captured on June 6, 1914, but escaped before it could be preserved.

5. *RANA PIPIENS* Schreber.

This species was found to be very abundant about ditches and in swampy places. It is the first of the amphibians to appear in the spring, specimens being taken about the middle of April. Eggs of this species were found on April 19, 1914, and small tadpoles of this species were seen the latter part of the month.

4 specimens, 40-85 mm., September 6, 1913, Nos. 51927-51930.

6. *RANA CLAMITANS* Latreille.

This species was rather uncommon, although not rare. Several specimens were taken from an old open well in a swamp in the fall, while others were captured in the spring.

4 specimens, 40-55 mm., September 6, 1913, Nos. 51933-51936.

7. *RANA CANTABRIGENSIS* Baird.

This species is common in pools adjoining wooded areas. They were also seen in large numbers along the railroad right of way in the springtime. The adults of this species are easily distinguished while floating at full length upon the surface of the water.

8. *RANA CATESBEIANA* Shaw.

Specimens of the bullfrog were taken in company with *Rana clamitans* from an old open well in a swamp. The characteristic call of this species was heard during the spring of 1913. From the few specimens taken and the absence of previous records from the Northern Peninsula the bullfrog is probably a rare species in Gogebic County.

2 specimens, 70 and 100 mm., September 6, 1913, Nos. 51931–51932.

9. *BUFO AMERICANUS* Le Conte.

This toad is common in Gogebic County, and many specimens were seen along the roads and in gardens from April to October.

1 specimen, 70 mm., September 2, 1913, No. 51926.

REPTILIA.

SERPENTES.

10. *THAMNOPHIS SIRTALIS* (Linnaeus).

This garter snake is very common in semiaquatic habitats, and several specimens were captured. Individuals of this species were seen in the spring of 1914 as early as May 20.

3 specimens, September, 1913, Nos. 51918–51920.

11. *STORERIA OCCIPITOMACULATA* (Storer).

The red-bellied snake was found a common species in Gogebic County. Of three specimens taken, one was captured under a log and the others were taken in the open field.

1 specimen, 270 mm., September 27, 1913, No. 51922.

1 specimen, 230 mm., May 9, 1914, No. 51921.

TESTUDINATA.

✓ 12. *CHRYSEMYS BELLII* (Gray).

Descriptions were given the writer of turtles from ponds near Wakefield, which make the presence of painted turtles in Gogebic County certain. Since *C. bellii* is very closely related to *C. cinerea* (Bonnaterre), a species common in the Southern Peninsula, the species found in Gogebic County was not determined. It is listed here as *C. bellii* since that species has been recorded from the adjoining county on the north, Ontonogan, by Ruthven.¹

¹ Ruthven, A. G., Herpetology of Michigan, Mich. Geol. and Biol. Surv., p. 144, 1912.

Eighteen species of amphibians and twenty-six of reptiles are recorded from the entire State of Michigan.¹ Of this number 13 of the amphibians and 6 of the reptiles have been found in the Northern Peninsula of Michigan, and one species of amphibian, *Rana catesbeiana*, is added to the fauna of the Northern Peninsula by the present collection. The four species of amphibians found in the Southern Peninsula thus far not reported from the Northern Peninsula are *Ambystoma tigrinum* Green, *Necturus maculosus* Rafinesque, *Ambystoma maculatum* (Shaw), and *Acris gryllus* LeConte. The reptiles are represented by fewer species in the Northern Peninsula than in the Southern, but five of the twenty-six species reported from the entire State having been recorded from the Northern. The relation of the amphibian and reptile fauna of Gogebic County to that of the entire Northern Peninsula may be seen in the following table.

Species of amphibians and reptiles known from the Northern Peninsula of Michigan.

Necturus maculosus Rafinesque.
Ambystoma jeffersonianum (Green).²
Hemidactylium scutatum (Schlegel).
Plethodon erythronotus (Green).²
Diemictylus viridescens Rafinesque.
Bufo americanus LeConte.²
Hyla pickeringii Holbrook.²
Hyla versicolor LeConte.²
Rana pipiens Schreber.²
Rana clamitans Latreille.²

Rana cantabrigensis Baird.²
Rana catesbeiana Shaw.²
Rana septentrionalis Baird.
Chorophilus nigratum LeConte.
Storeria occipitomaculata (Storer).²
Liopeltis vernalis (DeKay).
Thamnophis sirtalis (Linnaeus).²
Chelydra serpentina (Linnaeus).
? Chrysemys bellii (Gray)²

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¹ Ruthven, A. G., Herpetology of Michigan, Mich. Geol. and Biol. Surv., 1912.

² Recorded from Gogebic County.